

FIG. 1

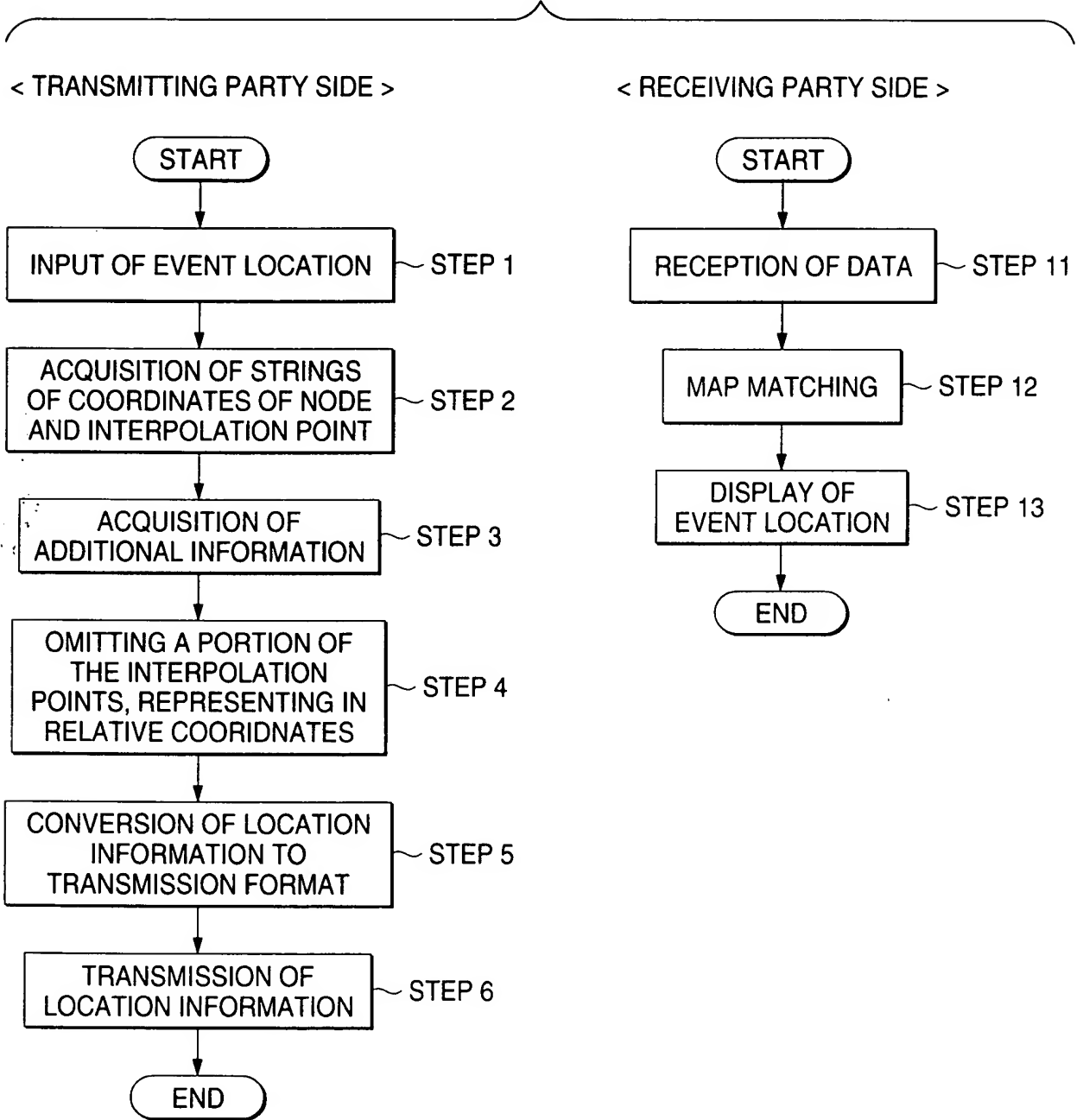


FIG. 2A

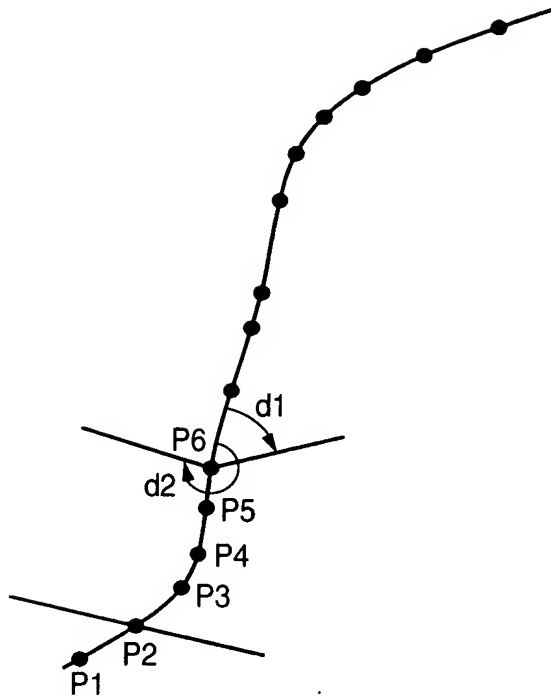


FIG. 2B

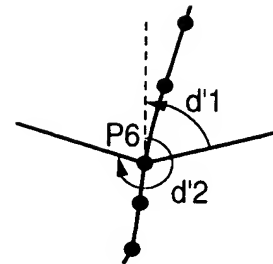


FIG. 3A

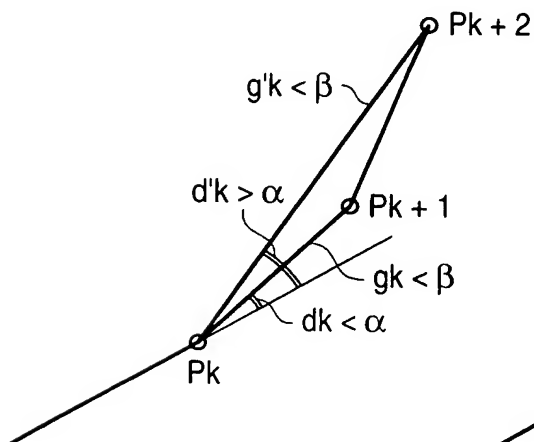


FIG. 3B

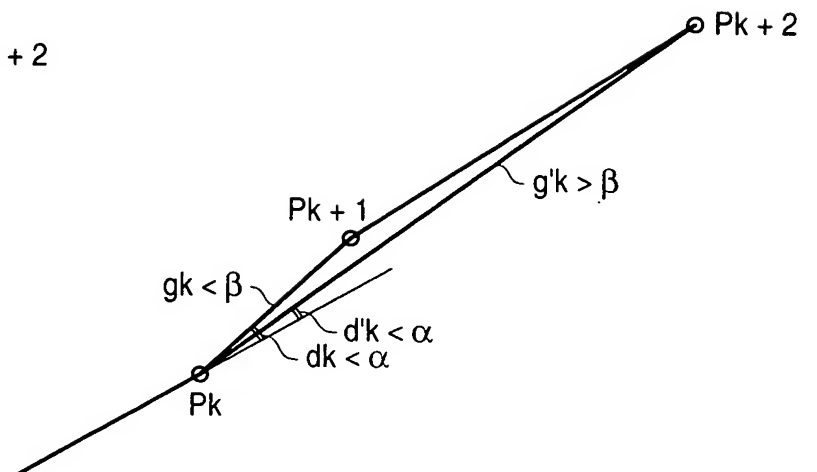
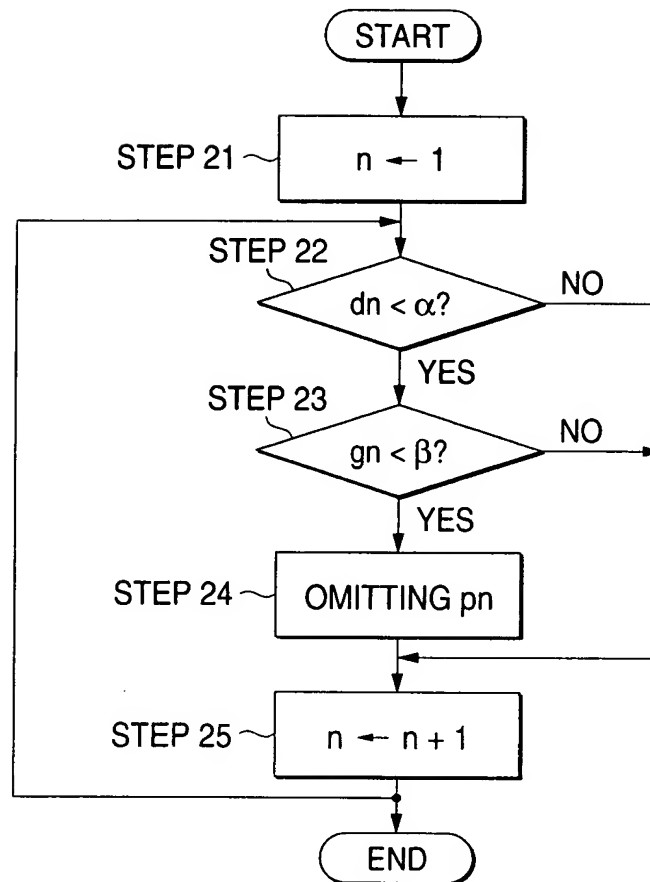


FIG. 4



*FIG. 5A*

## NODE STRING INFORMATION

TOTAL NUMBER OF NODES $n$
NODE NUMBER $p_1$
LONGITUDE
LATITUDE
NODE NUMBER $p_2$
RELATIVE COORDINATE $x_2$
RELATIVE COORDINATE $y_2$
⋮
NODE NUMBER $p_n$
RELATIVE COORDINATE $x_n$
RELATIVE COORDINATE $y_n$

*FIG. 5B*

## ADDITIONAL INFORMATION

ROAD TYPE CODE (EXPRESSWAY, NATIONAL HIGHWAY OR ETC.)
ROAD NUMBER (NATIONAL HIGHWAY 246 OR ETC.)
NUMBER OF CROSSING INFORMATION ITEMS
NODE NUMBER $p_2$
NUMBER OF CONNECTING LINKS TO $p_2$ $i_2$
ANGLE 1 OF CONNECTING LINKS TO $p_2$
⋮
ANGLE $i_2$ OF CONNECTING LINKS TO $p_2$
NODE NUMBER $p_6$
NUMBER OF CONNECTING LINKS TO $p_2$ $i_6$
ANGLE 1 OF CONNECTING LINKS TO $p_6$
⋮
ANGLE $i_6$ OF CONNECTING LINKS TO $p_6$

FIG. 6

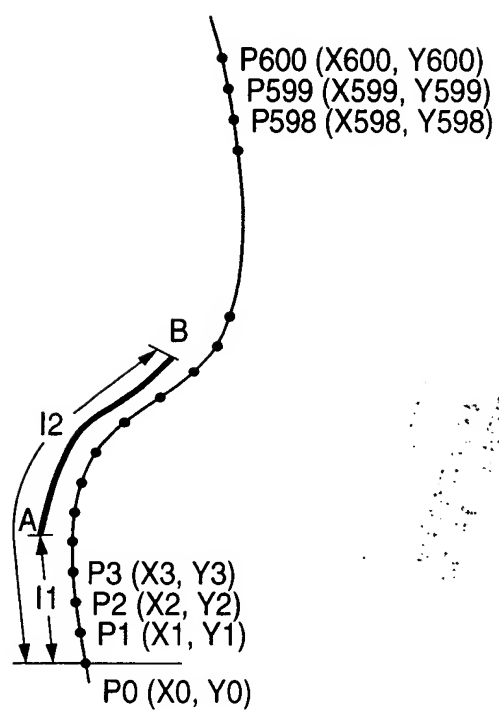


FIG. 7

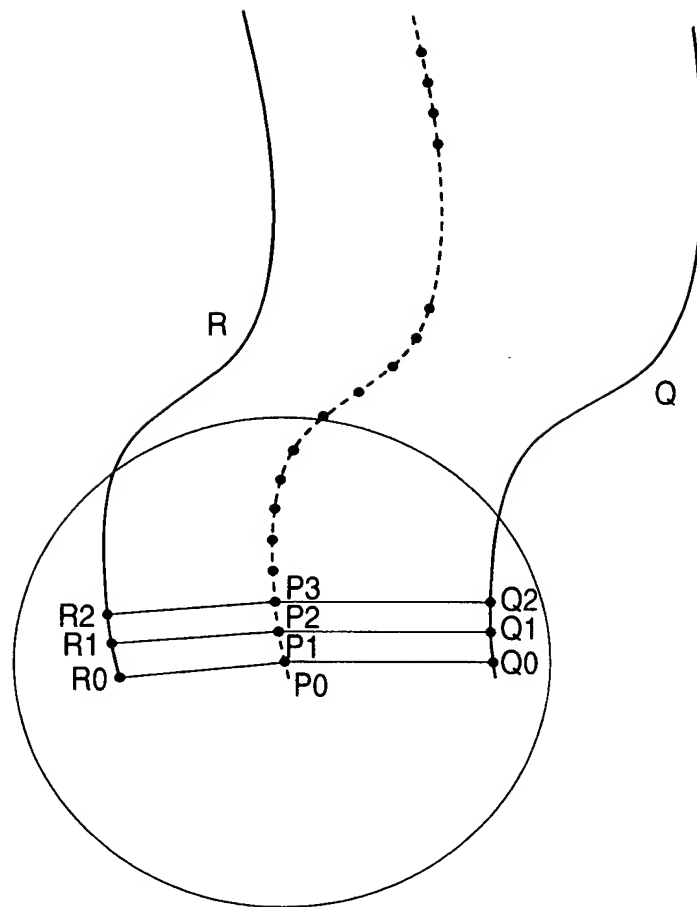


FIG. 8

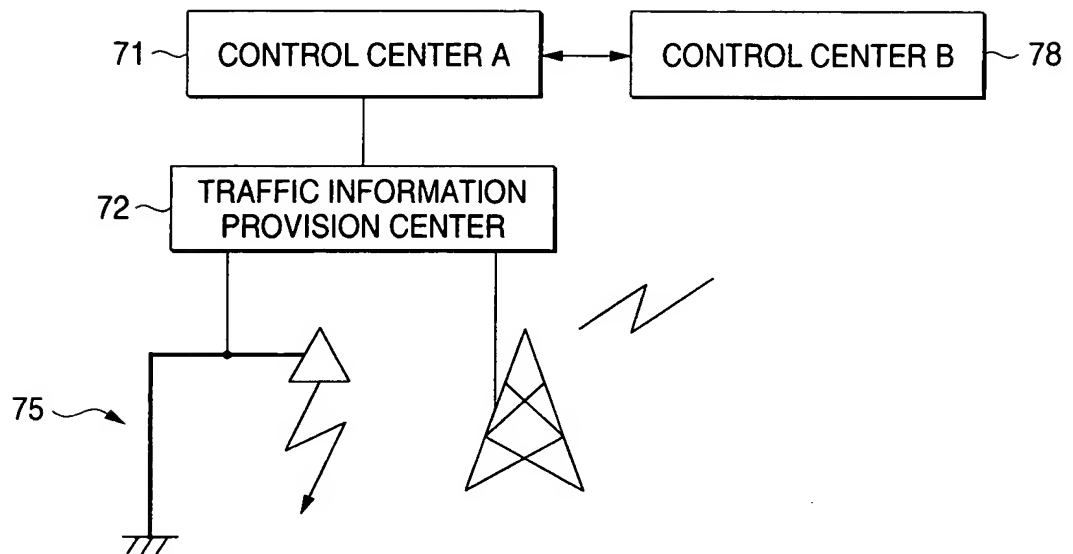


FIG. 9A

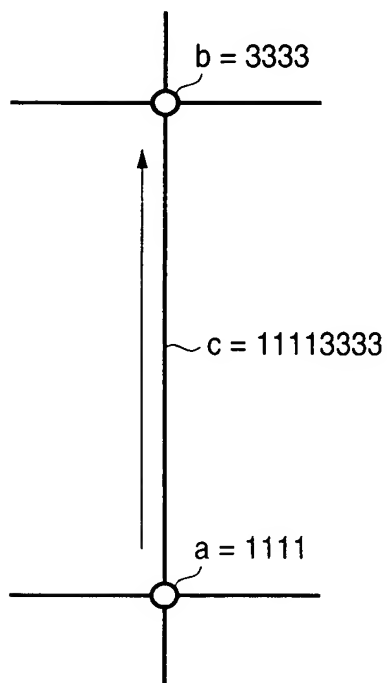


FIG. 9B

